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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,277	12/05/2000	Gary Gao	24598A	6965

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EXAMINER	
HOFFMANN, JOHN M	
ART UNIT	PAPER NUMBER
1791	
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12/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/730,277	GAO ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7,11-14 and 28-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7,11-14 and 28-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7, 12, 13, and 28-38 and 52 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bohy 40713412.

As set forth in prior Office actions: Bohy clearly has a bushing, two nozzles, and a gathering shoe. All of the limitations regarding the fluids are met because they are intended use limitations which Bohy's apparatus could utilize. See also the arguments section below.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11, 54 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 as applied to claims 28, 7 and 13, and further in view of Loeffler 4168959 (and optionally in view of applicant's admission in the 26 June 2006 response).

See how the references were applied in the 1/24/2006 and 1/29/2007 Office actions and above.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 as applied to claims 28 and further in view of Haruch 6161778

Claim 53 requires the fluid nozzle is an atomizer nozzle. As set forth previously in the 1/24/2006 Office action, Haruch teaches and improved cooling nozzle. It would have been obvious to use the Haruch nozzle as the Bohy cooling nozzle, for the advantages Haruch teaches.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 in view of Haruch 6161778.

Bohy clearly teaches everything except the atomizer nozzle.

As discussed above: it would have been obvious to use the Haruch (atomizer) nozzle as the Bohy cooling nozzle, for the advantages that Haruch teaches.

Claim 43 is clearly met.

Claims 40-41, 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 and Haruch as applied to claims 39 and 43 above, and further in view of Loeffler 4168959 (and optionally in view of applicant's admission in the 26 June 2006 response).

As discussed previously: Loeffler teaches that sprayer angle is a result-effective variable – and thus it would have been obvious to perform routine experimentation to determine the optimal angle.

Claim 41: Loeffler's drawings show a row of nozzles: it would have been obvious to use as many nozzles as necessary to be sure to cool all of the fibers. And it would have been an immediately obvious arrangement, depending upon the length of the bushing - for example if it is too long to permit all of the fibers to be sprayed by a single nozzle.

Claim 42 is clearly met as it substantially only relates to an intended use.

Claims 44-45: Looking to figure 1 of Bohy – it is a view from the back side, since applicator 31 is on the far side of the apparatus. Having a row of nozzles would mean that one end of the row would be at the front side, and the other end would be at the back side.

Claim 46-51 as discussed previously: it would have been obvious to supply the sprayers using a headers/manifolds as taught by Loeffler, for the advantages that Loeffle discloses.

Response to Arguments

Applicant's arguments filed 11/11/2008 have been fully considered but they are not persuasive.

It is argued that Bohy does not inherently meet the spraying emits air because the jets are not for spraying any material. It is largely irrelevant as what the jets are

"for". The issue is whether the structure of Bohy inherently is capable of meeting the functional limitations. The Office has provided rationale which shows Bohy is inherently capable of emitting air. Applicant has not pointed to any error in the Office's rationale. Applicant complains that the Office is using "mere assertion". Examiner disagrees - page 8 of the 8/27/2008 provides a logical rationale which ***proves*** it is necessarily inherent - and not a mere possibility.

As to the argument that there is no teaching within Bohy of the apparatus being capable of flowing the fluids at the same time. Examiner disagrees: the front page of the Bohy patent represents that fluids flow from both sets of nozzles at the same time.

As the court stated in *In re Schreiber*:

> A patent applicant is free to recite features of an apparatus either structurally or functionally. *See In re Swinehart*, 58 C.C.P.A. 1027, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims."). Yet, choosing to define an element functionally, i.e., by what it does, carries with it a risk. As our predecessor court stated in *Swinehart*, 439 F.2d at 213, 169 USPQ at 228:
>
> > where the Patent Office has ***reason to believe*** that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

128 F.3d 1473, 1478 (Fed. Cir. 1997) (emphasis added).

The Patent Office has reason to believe that the Bohy nozzle can conduct the flow of air as claimed: namely air is a fluid that can flow through any free space/path by the creation of a pressure differential. Since Bohy discloses that liquid can flow through the nozzles, this is evidence that a free path exists in the Bohy nozzle. Thus it is reasonable to conclude that Bohy can inherently meet the functional claim limitation.

Applicant has not demonstrated that the structure taught or suggested by Bohy does not possess the claimed functional characteristic of the broadly claimed apparatus.

As to the argument that col. 3, lines 51-53 of Bohy teaches not using the jets at the same time. This is not very relevant, since Bohy shows using both jets at the same time. The fair reading of the entire Bohy patent is that one can use the jets separately OR simultaneously.

The arguments regarding Loeffler as the primary reference are moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Hoffmann
Primary Examiner
Art Unit 1791

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